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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,269

04/01/2004

Hiroyuki Ishida

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03/17/2006

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EXAMINER

TSIDULKO, MARK

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/814,269	<b>Applicant(s)</b> ISHIDA ET AL.	
	<b>Examiner</b> Mark Tsidulko	<b>Art Unit</b> 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-11 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 7 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>112905</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The submission of amendment filed on 11/29/2005 is acknowledged. At this point claims 3, 4 have been amended, claims 5-18 have been added and the remaining claims left unchanged. Thus, claims 1-18 are at issue in the instant application.

#### *Claim Objections*

Claim 12 is objected to because of the following informalities: it is unclear which one of the two long edges of the groove is first. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

Claims 5, 6, 8, 11, 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is indefinite what does Applicant intend by:

Referring to Claim 5, “**upper surface of the semiconductor**” (line 2), “**first long edge**” and “**first length of the cut line**” (lines 3 and 4).

Referring to Claim 6, “**first row... with rectangular upper surfaces, wherein first long edges of the rectangular upper surfaces**” (lines 4, 5).

Referring to Claims 8 (lines 3, 4) and 11 (lines 3, 4), “**first long edge of the thin rectangular shape**” and “**first length of the cut line**”.

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Referring to Claims 15, “*first length of the headlamp cut line*” (lines 5 and 6), and “*cut line formed by first edge, in the elongated direction*” (lines 6, 7).

The status of Claims 5, 8, 11, 15 (i.e. if allowable or not) can not be determined because of the vagueness of the claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 9, 10, 16, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Thominet (US 6,565,247).

Referring to Claims 1, 9, 16 Thominet discloses (Fig.1) a plurality of semiconductor light emitting elements [10] having a substantially linear light emitting area and an optical device (lens [14] and screen [16]) forming a cut line (Fig.4). A shape of the light emitting area is inherently projected.

Referring to Claims 2, 17 Thominet discloses (Fig.1) a plurality of LEDs arranged in a row in a direction corresponding to at least a part of a cut line formed by projecting shape of the emitting area towards positions arranged in a row over at least a part of the cut line, as shown on Fig.4.

Referring to Claim 10 Thominet discloses (Fig.5) a reflector [42].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thominet (US 6,565,247) in view of Komoto (US 5,753,940).

Referring to Claims 3, 18 Thominet discloses the instant claimed invention except for an active layer and a groove for emitting a light wherein a depth of the groove reaching at least a part of the active layer.

Komoto discloses (Fig.3C) a compound semiconductor LED having an active layer [3] and a groove [8] for emitting a light, wherein a depth of the groove reaching at least a part of the active layer.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the semiconductor of Thominet with the active layer and a groove, as taught by Komoto, for directing the light out of the headlamp.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Komoto (US 5,753,940).

Komoto discloses (Fig.3C) a compound semiconductor LED having an active layer [3] and a grooves [8], located at the light radiating surface [5], for emitting a light, wherein a depth of the groove reaching at least a part of the active layer. It allows preventing the leakage of the light (col.4, line12).

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It is clearly understood for those skilled in the art of illumination, that the light from the semiconductor element, if to use in a vehicle headlamp, will be generated in a direction corresponding to at least a part of a cut line between bright and dark.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the semiconductor of Komoto in a vehicular headlamp, in order to direct the light out of the headlamp.

Claims 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komoto (US 5,753,940) in view of Thomonet (US 6,565,247).

Komoto discloses (Fig.3C) a compound semiconductor LED having an active layer [3] and the grooves [8], located at the light-radiating surface [5], for emitting a light. It allows preventing the leakage of the light (col.4, line12).

Komoto discloses the instant claimed invention except for a lens.

Thomonet discloses (Fig.5) a headlamp including a semiconductor light chip [40], a reflector [42] and a lens 43 for projecting the light emitted from the chip [40].

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the headlamp of the vehicle including a semiconductor light emitting element of Komoto and a lens of Thomonet, in order to project the light outward the vehicle.

***Allowable Subject Matter***

Claims 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and also, if would be amended to overcome the rejection indicated in a section "Claim Rejections 112" of the instant Office Action.

Claims 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and also, if would be amended to overcome the objection indicated in a section "Claim Objections" of the instant Office Action.

The following is a statement of reasons for the indication of allowable subject matter in both Claims 6 and 12: the prior art of record fails to show a vehicular headlamp having a first row of the semiconductor light emitting elements defining a first cut line and a second row, arranged at an angle to the first row and defining a second cut line.

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to show a vehicular headlamp having a first row of the semiconductor light emitting elements defining a first cut line and a second row, arranged at an angle to the first row and defining a second cut line.

***Response to Arguments***

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Applicant's arguments filed 11/29/2005 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Referring to Claim 4, Applicant argues, that no portion of Komoto discloses any cut lines.

In response, the Examiner is aware that Komoto fails to disclose a cut line, because the cut line belong to vehicular headlamp, but not to the any type of the light source, including LED. It is understood, that the light source of Komoto can be used in any desired type of the lighting device, including a vehicular headlamp.

The recitation “*vehicular headlamp*” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (571)272-2384. The examiner can normally be reached on 8 - 5.

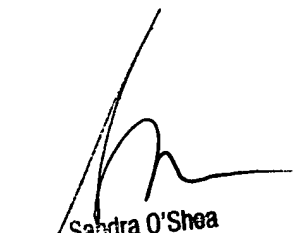


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.T.  
March 7, 2006



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